## **NASA** Facts

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## MEMORIAL SERVICE FOR THE CREW OF STS-107 NATIONAL CATHEDRAL WASHINGTON

## TRANSCRIPT:

REV. NATHAN BAXTER: In a time of overwhelming national trauma and grief, ancient Israel sought to find solace, as do we this day. They asked the question, "Should we turn from God who had not prevented our pain?" Should we gather only to find solace among ourselves or should we look to the God of faith, for healing for our souls? They chose to gather together in faith in a sacred place as we have done this day, and in the midst, they heard the reading of a poem preserved for us in the Book of Lamentations. The poet wrote and spoke to them, "The thought of my grief is bitter like poison. I think of it constantly and my very spirit is depressed within me. Yet moments of hope return when I remember one thing: God's mercy is eternal. It is beyond the pale of death. Yes, God's love and mercy are fresh every morning as sure as the new sunrise. In such time of grief I remember the Lord is all we have, so in God I put my trust."

Let us pray. God of love and mercy, behold your grief-stricken children of the world, especially the peoples of India, Israel, and America. Come be present among us as we are gathered in this hour. By the grace of your Holy Spirit, cause each soul to draw deeply into the well of their individual faith finding their consolation and healing for our souls.

We now lift in this service things we do not understand, asking that you would grant us assurance of your eternal peace for those we love but see no more, for it is in your eternal love and mercy that we now place our hope.

Let us all say together: Amen.

RABBI WARREN STONE: A reading from the Prophet Yehoshua Isaiah. The first verse is in Hebrew.

(Reciting Hebrew.)

On this mountain, the Lord of Hosts will make for all peoples a feast of rich food, a feast of well-aged wines, of rich food filled with marrow, of well-aged wine strained clear. And God will destroy on this mountain the shroud that is cast over all people, the sheet that is spread over all nations. God will swallow up death forever. Then the Lord God will wipe away the tears from all faces and the disgrace of his people he will take away from all the Earth, for the Lord has spoken. It will be said on that day oh, this is our God, we have waited for him so that he might save us.

This is the Lord for whom we have waited. Let us be glad and rejoice in God's salvation.

SEAN O'KEEFE: To be an astronaut is to accept a lofty calling. The seven daring souls who we grieve for today represented the best of the human spirit. They did their chosen calling proud and they had a special grace. Today we pay tribute to the Columbia astronauts for what they did for us in carrying on the great tradition of the select few we call astronauts.

For over 40 years these remarkable men and women who we've all come to know proudly wearing their orange space suits and blue flight jackets have played one of history's most unique diplomatic roles, acting in peace for all mankind, they serve as our good will ambassadors to the universe.

Every time we send humans into space, our astronauts look up to the starry firmament seeking to extend our horizons throughout the vast expanse of God's creation. Our explorers go forward into the unknown with hope and faith. As Commander Rick Husband said, "There is no way that you can look at the stars, at the Earth, at the moon, and not come to realize there is a God out there who has a plan and who has laid out the universe."

In this magnificent cathedral, a portion of the lunar surface brought back to Earth by moonwalkers Neil Armstrong and Buzz Aldrin is encased in a precious stain glass window. As we worship today in celebration of seven wonderful lives, this glorious window reminds us that the exploration of space will go on propelled by the human urge to strive, to seek, to find, and not yield, and by our common faith in our Creator.

Our astronauts also have another role. By pursuing research to improve people's lives and expand our understanding of the natural world, these brave individuals help pioneer the future in ways undreamed by our ancestors. This was the noble work that joyfully motivated our seven courageous Columbia crew when they ascended to the heavens three weeks ago.

Now some day due to our astronauts dedicated space research, we may find better means of fighting cancer, of life-saving drugs, helping our parents and grandparents stay healthy throughout their lives. We will always thank the crew of Columbia STS-107 mission for their passionate commitment to this cause.

Now, of course our astronauts count on all the talented men and women of the NASA family represented here today. To help advance these ambitious research objectives, they're amazing people. Public servants who make up the NASA family. Everyday our scientists, engineers, safety and support folks come to work at all of our centers, thankful for the opportunity to engage in such exciting meaningful work on behalf of the American people. It is through their efforts that we are making tangible progress in our quest to improve aviation safety and efficiency, promote medical discoveries, probe more deeply into the universe, explore the planets and better understand the dynamics of Earth's climate system.

And while this is a difficult period for the men and women of the NASA family, we will persevere. The support we've received from the astronauts' families, from the President, from the Vice President, and from the nation has been of tremendous strength. We will not let you down.

Throughout this period of mourning, the brave families of the Columbia crew have been rocks of courage and dignity, providing much comfort to the nation and it's inspiration to us all.

Dave Brown's parents, Paul and Dorothy, along with their -- his brother, Dave, are here with us today leading, I'm told, a very impressive contingent of the Brown family; as are John and Ian Clark, Laurel Clark's family; and Master Sergeant Jimmy Danielle, Mike Anderson's brother-in-law. To you and to all the families of the Columbia astronauts, we thank you for your incredible fortitude.

To honor the legacy of the Columbia astronauts, we have made a solid commitment to their families to find the cause of the accident, correct whatever problems we may find, and safely move forward with our work. Motivated by our mission goals of understanding and protecting the home planet, exploring the universe and searching for life, and inspiring the next generation of explorers, we will make good on this commitment.

The last element of our mission, to inspire the next generation of explorers is very important to NASA. It is a passion of ours. And because of the memory of the gallant 107 crew has done so much to inspire our youth, our shining hope for the future, to carry forth a torch of exploration and discovery, we are forever grateful to the Columbia astronauts.

As you might imagine, NASA has received a tremendous outpouring of condolences of the loss of the Columbia crew from people throughout the world. It struck us often of folks who pointed out the unique role that holds in many ways the astronauts have on our young and young at heart. One gracious letter came to us from Rosemary Callahan, the fifth grade teacher in Arlington, Virginia's St. Charles School. She wrote her letter after her students had thoughtfully taken time to write their own letters of condolence, and we thank them for their heartfelt gesture. In representing her students, we're honored to have Rosemary here with us today.

I'd like to read to you from her letter, which was written on Monday. "Today on the chalkboard I wrote the definition of a hero. 'A person admired for bravery, great deeds or noble qualities.' In the wake of the tragedy of Columbia and its astronauts, seven people have come to light as modern-day heroes. But they were heroes, people of great character and depth, long before Saturday. When profiled in the media, they were recognized for their spirit, for intellect, with a desire to learn and give to others, well-rounded people who could function together as a team. People who grabbed at life for the great and simple things. Indeed, they were the best."

Rosemary concluded these words by writing, "Our children continue to need heroes. Real heroes. May your beloved astronauts continue to inspire all as you move forward. Your hearts are heavy now, but in time God grant you a light heart again."

In this time of enormous sadness, these words from the Book of Revelation are most comforting: "And God will wipe away every tear from their eyes." The writer speaks of those who are at rest with God. These words also have significance for us who are still here on our earthly pilgrimage. "God will wipe away the tears from our eyes."

Our hope is not ultimately a hope grounded in the progress of human achievement, as remarkable as that may be, rather it is a hope grounded in the Creator who calls Rick, Willie, Michael, Kalpana, David, Laurel, Ilan and each of us by name. May he have the faith to lift our eyes towards the heavens as they did and find their God's peace.

May God bless the crew of STS-107 and may he lighten the hearts of their families and all who mourn for these valiant heroes.

PATTI LaBELLE: To the families of the astronauts and to everyone here, I am singing this song that I recorded for NASA, and my heart is with you. I'm ready. (Singing)

COL. ROBERT CABANA: The last few days have been extremely trying for those of us within the NASA family and for our entire nation. We grieve for the loss of our crewmates, our friends, our family. Once again we have shown how fragile life is on this planet in the risks we take when we explore beyond it.

The crew of Columbia was willing to accept those risks for the promise of what might come, from the research they did on their 16-day science mission. This was a special and diverse crew of mixed ethnicity, gender and religious belief, bound as one in pursuit of a common and noble goal, to improve life for all of us here on planet Earth through the science they were conducting in space.

There was nothing flashy about them. They performed flawlessly with understated excellence and were an example for us all of what we can accomplish when we work together as one. I'd like to share with you the faith that they had and the strength I've gained from them. It all began before leaving the suit room on launch day to head for the astrovan on the way to the pad. The commander, Rick Husband, stopped before exiting, turned to his crew, and the seven embraced as one. Jew, Hindu, Christian together, and

Rick led them in prayer. As they rode to the pad, they were filled with joy, anticipation and excitement and an inner peace that they were ready to ahead.

Colonel Ilan Ramon from the Israeli Air Force, he was in his element on orbit. At one point when asked by his flight surgeon how he felt. He responded, "I am sick," and his flight surgeon said, "What's wrong?" And he responded, "I have ground sickness, I must stay in space longer, I cannot return to Earth."

Captain Dave Brown, United States Navy, not only a medical doctor but a naval aviator and an astronaut on top of that. He lived to explore, to do research, to find knew cures, and he was fulfilled working in the laboratory aboard Columbia. It was where he was meant to be.

Kalpana Chawla, or K.C. as we affectionately called her. Don't let that diminutive frame fool you. The tenacity with which she tore into a problem and solved it was amazing. I've never met anyone with the discipline that K.C. had. Whenever I could make it to the gym before work in the morning, she was always there. I wrote her an e-mail while she was on orbit and I said I missed seeing her at her morning workouts at the gym. She told me not to worry, she was getting her workouts in space, and then she challenged me to a push-up contest, but only while she was still in microgravity.

Lieutenant Colonel Mike Anderson, United States Air Force, one of the finest officers I have ever known. A mild-mannered nice guy who excelled at all that he did. I never saw Mike lose his cool. He had a unique way to bring people together, find a common solution to difficult problems. He was rock solid and he was somebody I wanted on my team.

Commander Laurel Clark, United States Navy. Laurel's effervescent personality was contagious. She always had a smile and tackled every assignment with zeal. You didn't want to get in her way when she was on a mission. She was driven to succeed, and I will miss the love that she had to share with everyone.

Commander Willie McCool, United States Navy. Willie McCool. Is that a cool name for a test pilot astronaut or what? But that wasn't Willie's style. He, too, was a quiet mild-mannered nice guy who demonstrated his skill not with bravado, but with excellence and a helping hand that was always ready.

Prior to each flight, I make it a point to remind the first-time flyers to make a memory. Time on orbit is extremely expensive and it's easy to get caught up in the timeline and not realize where you are and what a unique opportunity you have and what a special place it is. And you have to plant your nose in front of a window and make a memory. Don't take a picture of it; you'll be disappointed when you get home, because it will never match what you keep in your brain with the eyes that God has given you. It'll never fade like a picture, it'll always be there and no one can ever take it away from you.

I sent Willie a note on orbit and I asked him if he'd made his memory yet. He replied not only had he made one, but he'd made many more. Flying in space was more than he

could have possibly imagined and he was so proud to be there and have the opportunity to serve.

Colonel Rick Husband, United States Air Force. Why break the mold with this crew. Another mild-mannered antithesis of what one thinks of as a fighter pilot, a leader of the highest caliber. But what really set Rick apart was his faith. I only wish I had half of it.

For those of us who are Shuttle commanders, we always worry about our landing, how it's going to come out. It gets analyzed to the minute detail when you return. And let's face it, when you're landing a three billion dollar spaceship, you don't want to look bad. When I was talking to Rick's wife, Evelyn, the other evening, she shared that Rick was concerned about having a really good landing and he prayed prior to his mission with his family that he would make the perfect landing. He needn't have been concerned. Rick was a gifted pilot and he would have nailed it. Evelyn pointed out that by hers and Rick's standards, it really was a perfect landing. Rick is home safe with his Lord. They will all be missed, but they will never be forgotten. They have shown us how space exploration in the pursuit of a noble goal can bind us together as one, unimpeded by differences in race, gender, and religion. They set a standard of excellence in their lives and faith in their creator that can be an example for us all, and we are truly blessed for having known them. It's difficult for us at a time like this to understand what's happened.

I'd like to close with a Bible verse that Rick Husband signed on each of his pictures. From the Old Testament Proverbs 3:5 through 6: "Trust in the Lord with all your heart. Lean not on your own understanding. In all your ways acknowledge him and he will make your paths straight." He has made straight the paths of the crew of STS-107 and he will be with all of us as we carry on.

VICE PRESIDENT RICHARD CHENEY: We are here today to honor the memory of seven lost explorers, to mourn seven good men and women, and to offer the respects of a grateful nation.

Saturday morning brought terrible news to all Americans when the flag of our country was lowered to half-staff in honor of our fallen Columbia astronauts.

They are solders and scientists, doctors and pilots, but above all they were explorers. Each of them followed his or her own path to the Space Program. Each led a life of high purpose and high achievement. The crew of the Columbia was united not by faith or heritage, but by the calling they answered and shared. They were bound together in the great cause of discovery. They are envoys to the unknown. They advanced human understanding by showing human courage.

The men and women aboard the Columbia were driven by a fierce determination to make life better here on Earth by unlocking the mysteries of space. Their 16-day six million mile mission was devoted to research and they worked 24 hours a day in alternating shifts on experiments in the physical sciences, the life sciences, and the space sciences. Every

great act of exploration involves great risk. The crew of Columbia accepted that risk in service to all mankind.

The Columbia is lost, but the dreams that inspired its crew remain with us. Those dreams are carried by the families of the astronauts who even in grief have urged that America go on with our Space Program. The legacy of Columbia must carry on, they tell us, for the benefit of our children and yours. Those dreams are carried by the dedicated men and women of NASA who time and time again have achieved the seemingly impossible and whose strength and skill will return us to space.

And the dreams of the Columbia crew will continue to inspire America. We're a nation of pioneers and immigrants, of bold explorers and discoverers, and we have invited kindred souls from many nations to join us in the greatest of all voyages. In doing so we honor the heritage of our country and help shape the future of all mankind.

Two generations ago the United States embarked on a course of space exploration. Today, despite this tragedy, we remain on that course. And while many memorials will be built to honor Columbia's crew, their greatest memorial will be a vibrant Space Program with new missions carried out by a new generation of brave explorers.

America and all the world will always remember the first flight of the Columbia in 1981, and we will never forget the men and women of her final voyage: Willie McCool, Kalpana Chawla, Ilan Ramon, Michael Anderson, David Brown, Laurel Clark and Rick Husband.

May a merciful God receive these seven souls. May he comfort their families. May he help our nation to bear this heavy loss, and may he guide us forward in exploring his creation.

REV. STEPHEN McWHORTER: So we do not lose heart, even though our outer nature is wasting away, our inner nature is being renewed day by day, for this light momentary affliction is preparing us for eternal weight of glory beyond all measure, because we look at not what can be seen but at what cannot be seen. For what can be seen is temporary, but what cannot be seen is eternal. For we know that if the earthly tent we live in is destroyed, we have a building from God, a house not made with hands eternal in the heavens, for in this tent we've grown longing to be clothed with our heavenly dwelling. If indeed when we have taken it off, we will not be found naked, for while we are still in this tent we grow under our burden because we do not wish to be unclothed but to be further clothed so that what is mortal may be swallowed up in life. He who has prepared us for this very thing is God who has given us his spirit as a guarantee, so we are always confident even though we know that while we are at home in the body, we are away from the Lord, for we walk by faith, not by sight. Yes, we do have confidence and we would rather be away from the body and at home with the Lord, so whether we are at home or away, we make it our aim to please him.

BRIG. GEN. CHARLES BALDWIN: They were only minutes from touchdown in Florida. Another remarkable extremely successful Shuttle mission was only one fast trip across the United States to touchdown. So quickly, so unexpectedly it ended, and the sad news of the loss of Columbia and the seven courageous astronauts spread around the world and

the world wept at the loss. Since that time in television briefings, in worship services, through songs and tributes, preaching and poetry, we have expressed our heartfelt grief. In our days of mourning the loss of these international heroes and in our disbelief that such a noble mission could end so tragically, we have found comfort in the words of Holy Scripture and in our faith. We realize again that when our mind cannot comprehend the situation, our heart is able to understand the hope that endures and the peace that passes all understanding.

In Hindu temples, in Christian churches, and in Jewish temples, the people of the world have honored the Columbia Seven, have comforted the families, and have found that the grace of God is sufficient for all our needs. What more can we say?

I humbly recommend three undeniable truths to sustain us through these difficult days. Undeniable truth number one: God is still in control. The great God, the creator and sustainer of the universe, is still in control. The hymn writer proclaimed, "This is my father's world. Oh, let me never forget, that though the wrong seems off so strong, God is the ruler yet."

At times of great tragedy we are attempted to believe that Almighty God might have dropped the ball, made a mistake, turned his head away, let us down. The opposite is true. At times of great tragedy God is more real to us than we could ever imagine. We realize again he was eternal. He was present from the beginning and promised to be with us to the end of the age. He knows our frailty and he sees our needs. He made us in his image. He placed a beautiful divine spark within us that calls us to reach for the stars, to discover new frontiers of his magnificent creation, to dream impossible dreams, and to take steps of faith in the journey of life.

When our adventuring and our learning falls short, he is there in the midst of our tragedy. Some may ask where was God a little before 9:00 a.m. on February 1st? When we lost control of the material failures that were happening, he took control of the lives of those on board.

The Christian Scripture says he knows when a sparrow falls. And if he sees that, surely he sees when the Shuttle falls and he weeps and he takes his children home. And then wonder of wonders, since he's still in control of his universe, he calls us again to learn, to explore, to discover the wonders of his creation.

Our hearts are renewed, our minds learn ways to do this better, and our spirits are filled with his comfort and his peace. God is still in control. What more can we say?

Undeniable truth number two: All mankind is indebted to the crew and families of the Space Shuttle Columbia. President Bush said it so well at the memorial service in Houston: "We find the best among us, send them forth into unmapped darkness, and pray they will return. They go in peace for all mankind and all mankind is in their debt."

How can we thank someone who gives his life for a high calling? How do we say thanks to the scientists who found a cure for a terrible disease and then died of exposure to the germs? How do we say thanks to the doctor who learned his skills and then operated for hours to remove a tumor? How do we say thanks to the solder, sailor, airman, marine who step forward in battle to secure the freedoms we hold dear?

How do we say thanks to these astronauts who put their lives at great risk knowing in possibility that one of a million parts could break and cause a catastrophe? How do we say thanks? Not with money. There's not enough to pay that debt. Not with fame. We humans are so fickle and we so quickly forget. Perhaps our genuine sincere commitment to continue the journey will best express that we will not let their sacrifice be in vain. They died for a cause bigger than themselves. They had a dream that was interrupted too soon. They stood in the gap between the known and the unknown, and we are indebted to the crew and families of Columbia.

President Lincoln wrote to the mother of a solder who died in battle "The solemn pride that must be yours to have laid so costly a sacrifice upon the alter of freedom." The Columbia Seven placed themselves on the alter of discovery and we are indebted to them and to their families. What more can we say?

Undeniable truth number three: When it's dark, the stars come out. Now, I wish I could take credit for that incredibly marvelous scientific statement, but I got it from one of the angels on the TV series "Touched By An Angel." It's an undeniable truth. Anyone who grew up in the city and never left it may never have seen the unbelievable star-filled canopy of space. What a loss it would be to live in a world of artificial night-lights and miss the wonder of countless stars in the sky.

I've only seen my astronaut friend Guy Gardener's video of his two Shuttle flights around the planet; it was pretty incredible. He said the nighttime was so brief it's hard to see the stars. His testimony, however, of the beauty of the sunrise and the sunset and the Shuttle view of space would make you long for a big open field far away from the city lights where it is dark so you can see the stars.

The same is true with people. When the tragedies of life turn a bright day into a frightening night, God's stars come out and these stars are families who say although we grieve deeply as do the families of Apollo 1 and Challenger before us, the bold exploration of space must go on. These stars are the leaders in Government and in NASA who will not let the vision die. These stars are the next generation of astronauts, who like the prophets of old said "Here am I, send me."

When it's dark, the stars come out. What more can we say, what more can we say? Thanks be to God. Amen.

REV. STEPHEN McWHORTER: Would you please stand as we pray together? We thank you, oh God, for Rick, for Willie, Michael, K.C., Laurel, David, and Ilan. We give thanks for their courage, commitment and curiosity that led them to reach beyond our

world to the stars. We would pray, our God, to those who now stand before you. We trust that they rest in your gracious presence. In this time of enormous sadness, we would ask that your spirit of comfort and compassion would cover us. You have promised us in your holy word that you will wipe away every tear from our eyes. Lord God, help us to shed them. Remember and remind us that as we walk in faith, we are not alone. Our faith tells us that you gave us Jesus Christ to us risking sacrifice. Our faith tells us that the life and death of Jesus is your ultimate gift of love to us, but not without cost. Lord God, walk with us in our journey of faith. We trust in you knowing that we do not have all of the answers and we may never have them, yet your word and promise of eternal life is our greatest gift.

Lord God, help us now to lift our eyes to the heavens as did these brave seven astronauts, and for them and for us may we find there your perfect peace. All of this we pray in your son's name.

Amen.

RABBI WARREN STONE: The seven beloved represented all the peoples of our Earth. (Reciting Hebrew.)

Source of all life, oh God, what our beloved astronauts knew deep in their innermost hearts from the curve of space looking homeward, that the Earth, our home, is a very sacred and fragile place, a place of great love, and sadly great pain, but our home, and all we cherish. And it is up to us to care and to protect this Earth of ours and all its wondrous creation and beauty from here through space and beyond, for if we destroy it, there is no one else after us.

Let me share the words of a poet "Eagle Poem" by the Lakota poet Joy Harjo: "To pray, you open your whole self to sky, to earth, to sun, to moon, to one whole voice that is you and know there is more, that you can't see, can't hear, can't know except in moments steadily growing and in languages that aren't always sound but other circles of motion, like eagle that morning, over salt river circled in blue sky in wind, swept our hearts clean, with sacred wings. We see you, see ourselves and know that we must take the utmost care and kindness in all things, breath in knowing we are made of all this and breath knowing we are truly blessed because we were born and die soon within a true circle of motion like eagle rounding out the morning inside us, we pray that it will be done in beauty, in beauty."

REV. JOHN BRYSON CHANE: Standing, let us offer a prayer and blessing for those who gave their lives for new visions of what is to come. Oh God Creator, let you command all things came to be, the vast expanse of interstellar space, galaxies, suns, moons, the planets in their courses and this fragile Earth, our island home.

As your human creation, we have always longed to touch the stars and extend our knowledge to those heavenly places always dreamed of but not yet realized. Those celestial temptations that stretch our understanding of the sciences that test our endurance, that challenge our courage and call us to explore places known only to you

alone are our passion, and in our passion for the possible, we have once again become painfully aware of the attending risks of our passion.

Most Gracious God, we ask you this day to bless the departed crew of Columbia, Michael, David, Kalpana, Laurel Blair, Rick, William and Ilan, who gave their lives searching for ways in which to make life here on Earth better for each one of us that they have left behind.

## (Taps played)

REV. JOHN BRYSON CHANE: We ask you now to bless and care for their families and friends who grieve and for colleagues who mourn the loss of seven members of their NASA family. Bless our nation and the nations of Israel and India during this time of great sorrow and pain, and yet even in our sorrow, bless and strengthen our resolve to fly tomorrow even higher than the wings of an eagle have taken us today. Believing in the words of the great Old Testament Prophet Isaiah who said to those who are left behind and broken, weary and downhearted "Have you not known, have you not heard, the Lord is the everlasting God, the creator of the ends of the Earth. He does not faint or grow weary, his understanding is unsearchable. He gives power to the faint and strengthens the powerless. Even youths will faint and be weary and the young will fall exhausted, but those who wait for the Lord shall renew their strength, they shall wound up with wings like eagles, they shall run and not be weary, they shall walk and not faint.

And the God who calls each of us by name and walks with us on every step of our journey, may that God's blessing be with you on this day as you continue to fly on the wings of eagles. Amen.